

6.10 XFP CAGE ASSEMBLY DIMENSIONS

The Cage Assembly requires EMI shielding capability for both front and back portions of the cage along with providing guidance for the connector, retention of the transceiver and features for heat sink attachment. The location of the EMI gaskets for a reference design is illustrated in [Figure 40](#) and a description of each EMI gasket is described in the sections below. The dimensional requirements for the cage are illustrated in [Figure 41](#).

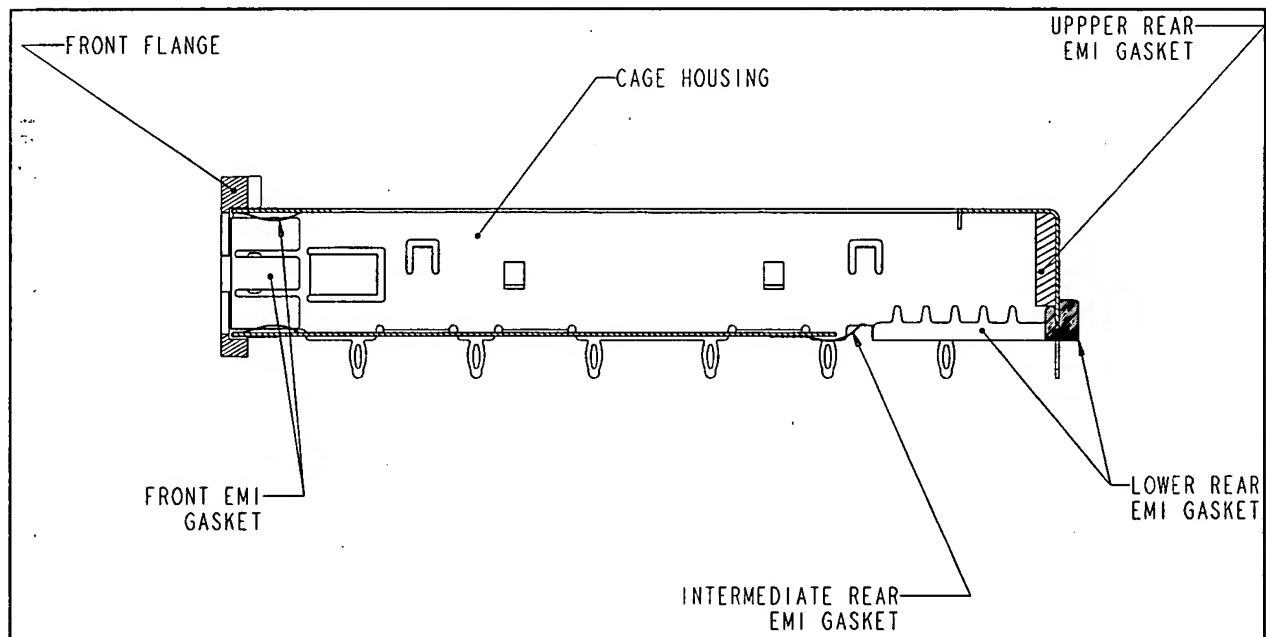


Figure 40 XFP Cage Components

6.10.1 XFP CAGE HOUSING

The metal cage has compliant leads for assembly to the host board. The cage material is copper alloy and the recommended plating options are:

- Tin-lead plate 2.54 micrometers minimum over copper flash
- Tin plate 2.54 micrometers minimum over 0.76 micrometers minimum nickel

or the equivalent materials.

6.10.2 XFP CAGE REAR EMI GASKETS

The purpose of the rear EMI Gaskets is to block any emissions that are emanating from the rear of the transceiver and carry them to chassis ground in the Host Board by directly contacting the transceiver.

6.10.2.1 XFP UPPER REAR EMI GASKET

The Upper Rear EMI Gasket is fastened to the rear inside surface of the cage with pressure sensitive adhesive. The recommended material for this gasket is conductive foam.

6.10.2.2 LOWER REAR EMI GASKET

The Lower Rear EMI Gasket is fastened to the bottom of the cage and contacts the bottom surface of the transceiver skirt. The recommended material for this gasket is a conductive elastomer.

6.10.2.3 XFP INTERMEDIATE REAR CAGE EMI GASKET (FINGER STOCK)

The Intermediate Rear EMI Gasket is fastened to the bottom of the cage and simultaneously contacts the transceiver and Host Board. The preferred design is illustrated as a series of metal springs consisting of a copper alloy material. The recommended plating options are:

- Tin-lead plate 2.54 micrometers minimum over copper flash
- Tin plate 2.54 micrometers minimum over copper flash
- or equivalent materials.

6.10.3 XFP CAGE FRONT CAGE EMI GASKET (FINGER STOCK)

The purpose of the Front EMI Gasket is to create a seal between the transceiver and the inside surface of the cage. The preferred design is illustrated as a series of metal springs that are fastened to the front of the cage and held in place by the front flange. The Front EMI Gasket material is copper alloy and the recommended plating options are:

- Tin-lead plate 2.54 micrometers minimum over copper flash
- Tin plate 2.54 micrometers minimum over copper flash
- or equivalent materials.